

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)

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| Application Number | | 10597392 |
| Filing Date | | 2006-07-24 |
| First Named Inventor | Maysam Ghovanloo | |
| Art Unit | | |
| Examiner Name | | |
| Attorney Docket Number | UOM 0327 PUSA | |

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| | 1 | 3372234 | | 1968-03-05 | Rowsher, et al. | |
| | 2 | 3427614 | | 1969-02-11 | Vinding | |
| | 3 | 3501704 | | 1970-03-17 | Webb | |
| | 4 | 3512087 | | 1970-05-12 | Lewis | |
| | 5 | 3600680 | | 1971-08-17 | Maniere | |
| | 6 | 3539828 | | 1970-11-10 | Crouse | |
| | 7 | 3611298 | | 1971-10-05 | Jacobson | |
| | 8 | 3614639 | | 1971-10-19 | Belman | |

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| | | | | | | |
|--|----|---------|--|------------|--------------------|--|
| | 9 | 3623075 | | 1971-11-23 | Bench, et al. | |
| | 10 | 3636454 | | 1972-01-18 | Pasternack, et al. | |
| | 11 | 3660771 | | 1972-05-02 | Balugani, et al. | |
| | 12 | 3740669 | | 1973-06-19 | Nahay | |
| | 13 | 3773975 | | 1973-11-20 | Koziol | |
| | 14 | 3846708 | | 1974-11-05 | Franco | |
| | 15 | 3908169 | | 1975-09-23 | Tong | |
| | 16 | 3947769 | | 1976-03-30 | Rousos, et al. | |
| | 17 | 3949313 | | 1976-04-06 | Tamada, et al. | |
| | 18 | 3979685 | | 1976-09-07 | Motley, et al. | |
| | 19 | 3991389 | | 1976-11-09 | Dwire, et al. | |

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| | | | | | | |
|--|----|---------|--|------------|------------------|--|
| | 20 | 4021744 | | 1977-05-03 | Monte Fusco | |
| | 21 | 4010323 | | 1977-03-01 | Peck | |
| | 22 | 4103244 | | 1978-07-25 | Tan | |
| | 23 | 4115738 | | 1978-09-19 | Mitarai, et al. | |
| | 24 | 4451792 | | 1984-05-29 | Gay | |
| | 25 | 4363002 | | 1982-12-07 | Fuller | |
| | 26 | 4368439 | | 1983-01-11 | Shibuya, et al. | |
| | 27 | 4485347 | | 1984-11-27 | Hirasawa, et al. | |
| | 28 | 4485448 | | 1984-11-27 | Kurth | |
| | 29 | 4486715 | | 1984-12-04 | Maas, et al. | |
| | 30 | 4488120 | | 1984-12-11 | Carsten | |

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| | | | | | | |
|--|----|---------|--|------------|-------------------|--|
| | 31 | 4513427 | | 1985-04-23 | Borriello, et al. | |
| | 32 | 4529941 | | 1985-07-16 | Lipoff | |
| | 33 | 4533874 | | 1985-08-06 | Fischer | |
| | 34 | 4543953 | | 1985-10-01 | Slocum, et al. | |
| | 35 | 4551846 | | 1985-11-05 | Takeda, et al. | |
| | 36 | 4568882 | | 1986-02-04 | Single | |
| | 37 | 4616187 | | 1986-10-07 | Watanabe | |
| | 38 | 4716376 | | 1987-12-29 | Daudelin | |
| | 39 | 4752742 | | 1988-06-21 | Akaiwa | |
| | 40 | 4773085 | | 1988-09-20 | Cordell | |
| | 41 | 4825452 | | 1989-04-25 | Wong | |

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| | | | | | | |
|--|----|---------|--|------------|--------------------|--|
| | 42 | 4987374 | | 1991-01-22 | Burke | |
| | 43 | 5053717 | | 1991-10-01 | Schulz, et al. | |
| | 44 | 5105466 | | 1992-04-14 | Tsujiuchi, et al. | |
| | 45 | 5155446 | | 1992-10-13 | Ebeelee, et al. | |
| | 46 | 5245632 | | 1993-09-14 | Greiss | |
| | 47 | 5309113 | | 1994-05-03 | Mimura, et al. | |
| | 48 | 5317309 | | 1994-05-31 | Vercelloti, et al. | |
| | 49 | 5329258 | | 1994-07-12 | Matsuka | |
| | 50 | 5394109 | | 1995-02-28 | Simard | |

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|---|-------------|------------|----------|--|
| 1 | 20010045920 | 2002-04-18 | Thompson | |
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|--------------------|---------|---|--------------------------|
| | 1 | TROYK, P.R., ET AL., Development of BION Technology for Functional Electrical Stimulation: Bidirectional Telemetry, 23rd IEEE-EMBS Conference Proceedings, Vol. 2, pp. 1317-1320, 2001. | <input type="checkbox"/> |
| | 2 | GALBRAITH, D.G., ET AL., A Wideband Efficient Inductive Transdermal Power and Data Link With Coupling Insensitive Gain, IEEE Trans. Biomed. Eng. Vol. 34, pp. 265-275, April 1987. | <input type="checkbox"/> |
| | 3 | ZIERHOFER, C.M., ET AL., The Class-E Concept for Efficient Wide-band Coupling-Insensitive Transdermal Power and Data Transfer, IEEE 14th EMBS Conference Proc., Vol. 2, pp. 382-383, 1992. | <input type="checkbox"/> |
| | 4 | TROYK, P.R., ET AL., Inductive Links and Drivers For Remotely-Powered Telemetry Systems, Antennas and Propagation Symposium, Vol. 1, pp. 60-62, 2000. | <input type="checkbox"/> |
| | 5 | POLK, C., ET AL., Handbook of Biological Effects of Electromagnetic Fields, Chap. 2, CRC Press, 1986. | <input type="checkbox"/> |

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|----|--|--------------------------|
| 6 | VON ARX, J.A., ET AL., On-Chip Coils With Integrated Cores For Remote Inductive Powering of Integrated Microsystems, Transducers 97, pp. 999-10002, June 1997. | <input type="checkbox"/> |
| 7 | GHOVANLOO, M., ET AL., A BICMOS Wireless Interface Chip for Micromachined Stimulating Microprobes, IEEE-EMBS Special Topic Conference on Microtechnologies in Medicine and Biology Proceedings, pp. 277-282, Madison, Wisconsin, May 2002. | <input type="checkbox"/> |
| 8 | GHOVANLOO, M., ET AL., A High Data Transfer Rate Frequency Shift Keying Demodulator Chip For The Wireless Biomedical Implants, IEEE 45th Midwest Symposium on Circuits and Systems Proc., Tulsa, Oklahoma, August 2002. | <input type="checkbox"/> |
| 9 | GHOVANLOO, M., ET AL., A Wideband Frequency-Shift Keying Wireless Link For Inductively Powered Biomedical Implants, IEEE Trans. on Circuits and Systems I, Vol. 51, No. 12, pp. 2374-2383, December 2004. | <input type="checkbox"/> |
| 10 | GHOVANLOO, M., ET AL., A Modular 32-site Wireless Neural Stimulation Microsystem, IEEE Journal on Solid-State Circuits, Vol. 39, No. 12, pp. 2457-2466, Dec. 2004. | <input type="checkbox"/> |
| 11 | GHOVANLOO, M., ET AL., Fully Integrated Power Supply Design For Wireless Biomedical Implants, IEEE-EMBS Special Topic Conference on Microtechnologies in Medicine and Biology Proceedings, pp. 414-419, Madison, Wisconsin, May 2002. | <input type="checkbox"/> |

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Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

☐ That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

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☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

☐ See attached certification statement.

☐ Fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ None

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

| | | | |
|------------|--------------------|---------------------|------------|
| Signature | /David R. Syrowik/ | Date (YYYY-MM-DD) | 2006-12-01 |
| Name/Print | David R. Syrowik | Registration Number | 27956 |

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